

(such as Internet web sites that provide online customers instant quotations for multi-item requests) and other applications that would not otherwise be possible.

In addition, in at least some embodiments, the fulfillment management system may be easier to install, configure, and use than conventional systems. This may
5 allow more suppliers to join and participate in a supply chain, which may help to increase the efficiency of the fulfillment process. The larger number of suppliers in the supply chain may also help to increase the options available to a customer and expand the market for the suppliers' products.

Other technical advantages may be readily apparent to those skilled in the art
10 from the figures, description, and claims included herein.

BRIEF DESCRIPTION OF THE DRAWINGS

To provide a more complete understanding of the present invention and further features and advantages thereof, reference is now made to the following description taken in conjunction with the accompanying drawings, in which:

5 FIGURE 1 illustrates an example system for fulfilling commitments within a distributed supply chain environment;

 FIGURE 2 illustrates an example ATP request workflow;

 FIGURE 3 illustrates an example quotation confirmation workflow;

 FIGURE 4 illustrates an example promise acceptance workflow;

10 FIGURE 5 illustrates an example component promise changes workflow; and

 FIGURE 6 illustrates an example local fulfillment manager for managing ATP data in a distributed supply chain environment.

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DETAILED DESCRIPTION OF THE INVENTION

FIGURE 1 illustrates an example system 10 for fulfilling commitments in a distributed supply chain environment. System 10 includes one or more clients 12 representing appropriate Enterprise Resource Planning (ERP) systems, Sales Force Automation (SFA) systems, Order Management Systems (OMS), and any other suitable systems. Each client 12 may be associated with one or more customers, users, or other entities. In a particular embodiment, clients 12 may include sales and customer service oriented applications seeking to augment or replace their existing order promising and fulfillment capability. Clients 12 communicate and interact with fulfillment server 16 using an application-specific integration layer (not explicitly shown), which may include an application programming interface (API), an object request broker (ORB), or another suitable software interface operating at clients 12, fulfillment server 16, or both clients 12 and fulfillment server 16. Network 18 couples clients 12 to fulfillment server 16 and may be a local area network (LAN), a metropolitan area network (MAN), a wide area network (WAN), a global network such as the Internet, or any other suitable network or collection of networks.

Available-to-promise (ATP) servers 14 each support or are associated with a planning engine able to provide, among other things, product availability responses to component ATP requests in the form of component quotations. One or more planning engines associated with ATP servers 14 may also provide pricing and other additional capabilities, as appropriate. A local fulfillment manager (LFM) 22 that is located at or otherwise associated with an ATP server 14 manages the interaction between ATP server 14 and fulfillment server 16. In one embodiment, LFM 22 is a “thin” engine whose primary responsibility within system 10 is to communicate component requests, component quotations, component quotation confirmations, and component promises to and from ATP server 14 in a suitable format, and to monitor their status to the point of order fulfillment. In another embodiment, fulfillment server 16 may communicate and exchange information with an ATP server 14, without requiring the use of an LFM 22. In yet another embodiment, fulfillment server 16 may communicate and exchange information with an LFM 22 without requiring the use of an associated ATP server 14. ATP servers 14 provide services to fulfillment server 16 through an application-specific integration layer (not explicitly shown), which may